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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,437	05/23/2001	Yoshio Nakao	826.1726	8890

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EXAMINER

SERROU, ABDELALI

ART UNIT PAPER NUMBER

2654

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/862,437

Applicant(s)

NAKAO, YOSHIO

Examiner

Abdelali Serrou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 2000-290886.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/15/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. In response to the office action from 12/08/2004, the applicant has submitted an amendment, filed on 5/23/2001, adding and deleting text to include new limitations to the amended claims.

### ***Response to Arguments***

2. Applicant's arguments about the original limitations have been fully considered, but are not persuasive. The amended office action is given bellow.

3. As per claims 4-7, the applicant failed to overcome the rejection under 35 U.S.C, second paragraph, instead, he changed "related parts" and "common topics" to "related passage". Therefore, claims 4-7 have been successfully rejected.

4. As per claims 1, 3, and 9-12:

Applicant argues (Amendment, page 7) that Mani et al.'s teachings (in "Summarizing Similarities and Differences Among Related Documents") are not relevant to the claimed invention. However, Mani et al. teach a multi-document reading apparatus, a topic extraction apparatus, and a storage medium for the computer program (see page 4 of the previous Office Action). Thus, Mani et al.'s teachings are relevant to the applicant's invention.

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Applicant argues (Amendment, page 8) that Mani et al do not teach extracting topics from the documents themselves. However, Mani et al teach a tool that analyzes, detects differences, and summarizes a plurality of documents (page 358, § 2, lines 1-10).

Applicant argues (Amendment, page 9) that Fleicher merely divides a document into sections and does not recognize a thematic hierarchy.

Applicant argues (Amendment, page 10) the relevance of Ching to the topic extraction. Applicant should notice that Ching was used as reference for displaying different version of documents.

5. As per claims 2 and 8, the applicant argued that Mani et al. do not teach an extracting device that calculates a relevance score between topics. Since Mani et al. teach a system that “pinpoint similarities and differences, and align text segments” (page 357, Abstract). It is obvious that the system calculates a relevance score between topics; otherwise, it would not extract similarities and differences between topics. O’Carroll reference was used to reject the limitation of claim 8, wherein the applicant merges two documents and output an integrated document.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claim 1, 3-7, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mani et al. ("Summarizing Similarities and Differences Among Related Documents", The MITRE Corporation, Massachusetts Institute of Technology, 1999) in view of Fleischer (US 5,960,383) and further in view of Stein et al. (Computational Intelligence, v 16, n 4, Nov 2000. p 606-613) and even further in view of Ching (U.S 6,560,620 filed on August 3, 1999).

8. As per claims 1, 3 and 9 Mani discloses:

- A multi-document reading apparatus (a tool for analyzing document collections such as multiple news stories, page 358, § 2, line 2 and 3)
- A topic extraction apparatus extracting a topic that commonly appears in the plurality of documents (extracting information content, page 357 § 2, line7, and page 357. col. 2, lines 5-8).
- A storage medium to store the program that causes the computer to perform (The focus of the work described here is to provide a tool "computer" for analyzing document collections such as multiple news stories, page358, column 1, § 2, lines 1-3)

However, Mani does not disclose a document reading apparatus that recognizes a thematic hierarchy of each document.

Fleischer, however, discloses an apparatus recognizing the thematic hierarchy (col. 1, lines 45-47).

Fleisher and Mani are analogous art because they are from the same art of information extraction.

Therefore, it would have been obvious to combine Mani with Fleischer for the benefit of obtaining a multi-document reading apparatus that extracts topic of documents, recognizes thematic hierarchy of each document, and stores its own operating program in a storage medium.

Neither Mani nor Fleischer teach an apparatus that detects topics of various sizes.

Stein et al., however, teach a “MD summarizer” (page 612, line 6) that detects the “size of documents” (page 612, line 26).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention to have added Stein et al.’s documents size detection system to the combined system of Mani and Fleischer, in order to help the user to choose the appropriate size of documents for reading.

Neither Mani nor Fleischer or Stein et al. teach an apparatus that displays the taken-out description parts as the related passages side by side.

The Ching reference, however, discloses a computer that compares the content of two different documents and displays the taken-out description (identified segment) from the first topic on one side and displays the identified segment from the second document on the other side (see figure 8 and column 2, lines 34-38).

Mani, Fleischer, Stein et al., and Ching are analogous art because they are from the same field of multi-document reading, thematic hierarchy recognition, information extraction, display system and a storage medium.

Therefore, at the time of invention it would have been obvious to a person of ordinary skill in the art, to have added Ching’s side-by-side display feature to documents size detecting system of Stein et al., to the thematic hierarchy recognizer of Fleischer, and to the multi-

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document reading apparatus of Mani, in order to provide a system that will help the user to compare and extract similarities and differences and quickly identify the changes between the two documents or subdocuments (passages).

9. As per claim 4, According to the argument used above for rejecting claim 3, Ching teaches a display system wherein the related parts are displayed side by side. In addition, Ching teaches a two windows display system wherein the first window shows the original documents side-by-side and a second window showing the new versions of the original documents side-by-side (Fig. 2, element 210). Therefore, the display system used can obviously display a two windows screen wherein one of the windows shows the original documents side-by-side and the other window shows the related parts side by side in order to help the user to compare document without browsing through different screens.

10. As per claims 5 and 6, the system used by Ching can obviously perform the display operations cited for the same reasons as set for the rejection of claim 4.

11. As per claim 7, Ching teach a plurality of thematic hierarchies corresponding to a plurality of documents (Fig. 9). The drawing does not show the relationship between the pluralities of thematic hierarchies based on the plurality of common topics in related passages and a designated part of the plurality of documents in accordance with an instruction from the user given on the drawing. For the rest of the limitations, the examiner takes official notice that it's well known to have systems that perform data drawing or representation. Thus, it would

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have been obvious to one skilled in the art at the time of the invention to design an apparatus that perform the disclosed limitation.

12. As per claim 10, since we have an apparatus that recognizes the thematic hierarchy, extracts information, displays, and stores it in a storage medium, it is necessary that there be signal propagation between the different parts of the apparatus for the communication to take place.

13. As per claims 11, the examiner notes that the method recited (in claim 11) is embedded in the apparatus described in claim 1. Therefore, the method of claim 11 is rejected for the same reasons, as is claim 1.

14. As per claim 12, the examiner takes official notice that it's well known to have a user to input designating documents for processing in order to have more control over the apparatus. Thus, it would have been obvious to one skilled in the art to designate a user to accomplish the method, recited in claim 11, of the apparatus mentioned in claim 1.

15. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mani, Fleischer, and Ching as applied to claim 1 above, in further view of Garret O'Carroll (U.S. 6,772,165).

Mani teaches an extracting device that extracts topic sets based on lexical similarities (the approach described here exploits the results of progress in information extraction...., the



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summarizer can pinpoint similarities and differences, and align text segments, page 357, § 1, lines 4-8).

Mani, Fleischer, and Ching do not disclose a method that merges two related documents and creates a new integrated document.

O'Carroll, discloses a system for merging the source document with at least one other source document to provide the target document (According to the invention, there is provided a document processing system comprising means for processing a source document to provide a target document, characterised in that the processing means comprises means for merging the source document with at least one other source document to provide the target document, column1, § 3 and figures 8-11). It would have been obvious for an artisan at the time of the invention to merge two related documents into a single integrated document to help the user by conveniently locating the desired information into a single document for reading.

### *Conclusion*

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdelali Serrou whose telephone number is 571-272-7638. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Smits can be reached on 571-272-7628. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abdelali Serrou  
06/15/05



**VIJAY CHAWAN  
PRIMARY EXAMINER**